CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| DRIVERS | S WHO SUS | TAINED FA | TAL OR SERIO | OUS INJUF | RIES I | IN MINC | OR OR I | /ODERA | TE SEVE | RITY AIR BA | G DEPLOY | MENT CRASHES | | | | | |
|----------------|----------------|----------------|--------------|----------------|--------|---------|---------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|------------------------------------------------------------------------------------------|---------------------------|
| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
| 1 | CA91009 | AVAILABLE | Jun-91 | Jun-91 | IL | 79 | FEMALE | 62 | 120 | YES | 1991 | FORD | TAURUS | 8 | YES | MULTIPLE BILATERAL RIB FXS; 2 STERNUM FXS; ATRIUM/PERICARDIUM/SPLEEN LACERATION | DAB; STEERING WHEEL |
| 2 | CA91012 | AVAILABLE | Aug-91 | Sep-91 | PA | 36 | FEMALE | 64 | 112 | YES | 1990 | DODGE | SHADOW | 14 | NO | MULTIPLE BILATERAL RIB FXS; ABDOMINAL AORTA RUPTURE; RUPTURED SPLEEN | DAB; STEERING WHEEL |
| 3 | NC92008 | AVAILABLE | Aug-90 | Aug-90 | TX | 64 | FEMALE | 56 | 95 | UNK | 1990 | FORD | TAURUS | 12 | UNK | MULTIPLE RIB FXS; RIGHT & LEFT HEMOTHORACES; BILATERAL PULMONARY CONTUSIONS | DAB; STEERING WHEEL |
| 4 | CA93008 | AVAILABLE | Dec-92 | May-93 | SC | 37 | FEMALE | 62 | 130 | NO | 1991 | CHEVROLET | CORSICA | 16 | YES | BASILAR SKULL FX; BRAINSTEM LACERATION | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 5 | CA93009 | AVAILABLE | Aug-93 | Aug-93 | со | 71 | FEMALE | 62 | 129 | NO | 1990 | FORD | TAURUS | 10 | YES | C-SPINE FX; BRAIN STEM LACERATION; SUBDURAL HEMATOMA; SUBARACHNOID HEMORRHAGE; BILATERAL RIB FXS; LACERATION TO AORTA, HEART & LIVER | DAB |
| 6 | CA94005 | AVAILABLE | Apr-93 | Feb-94 | NY | 76 | FEMALE | 62 | 115 | NO | 1992 | CHEVROLET | CORSICA | 13 | UNK | MULTIPLE RIB FXS; RIGHT HUMERUS FX; ATLANTO- OCCIPITAL DISLOCATION; SKULL FX | DAB |
| 7 | DS94022 | AVAILABLE | Feb-94 | Dec-94 | CA | 74 | FEMALE | 59 | 128 | YES | 1992 | CHEVROLET | CORSICA | 7 | YES | MASSIVE INTRATHORACIC HEMORRAGE | DAB |
| 8 | IN95005 | AVAILABLE | Sep-94 | Feb-95 | IL | 51 | FEMALE | 64 | 148 | NO | 1990 | CADILLAC | ELDORADO | 13 | NO | MULTIPLE RIB FXS; STERNUM FX; BRAIN STEMAORTA/LIVER LACERATIONS; C1/C2 FX/DISLOCATION; SUBARACHNOID HEMORRHAGE | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------|------------------|
| 9 | IN95006 | AVAILABLE | Feb-95 | Feb-95 | IN | 38 | FEMALE | 62 | 110 | NO | 1990 | LINCOLN | CONTINENTAL | 11 | NO | BASILAR SKULL FX; MEDULLA TRANSECTION; LEFT RIB FXS; LUNG CONTUSIONS; HEART VALVE LACERATION | DAB |
| 10 | DS95023 | AVAILABLE | Nov-95 | Dec-95 | WA | 17 | FEMALE | 59 | 126 | NO | 1989 | DODGE | DAYTONA | 9 | NO | MASSIVE BASILAR SKULL FX; LACERATION CAVERNOUS SINUSES | DAB |
| 11 | IN95019 | AVAILABLE | Nov-94 | Nov-95 | sc | 36 | FEMALE | 65 | 126 | NO | 1990 | FORD | TAURUS | 10-15 | TBD | RIGHT VENTRICULAR HEART LACERATIONS; LUNG CONTUSIONS | DAB |
| 12 | IN96009 | AVAILABLE | May-94 | Apr-96 | IL | 46 | FEMALE | 63 | 140 | NO | 1994 | ТОУОТА | CAMRY | <10 | UNK | NONANATOMIC BRAIN INJURY WITH LOSS OF CONSCIOUSNESS | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|----------------------------------------------------------------------------------------|---------------------------|
| 13 | CA91010 | AVAILABLE | Jun-91 | Jun-91 | СО | 46 | MALE | 72 | 230 | YES | 1991 | PONTIAC | FIREBIRD | 19 | NO | MULTIPLE BILATERAL RIB FXS; SEVERE MYOCARDIAL CONTUSION | DAB; STEERING WHEEL |
| 14 | NC93007 | AVAILABLE | Nov-92 | Nov-92 | PA | 78 | MALE | 70 | 230 | NO | 1991 | CHEVROLET | CORSICA | 8-10 | TBD | MULTIPLE BILATERAL RIB FXS; SEVERE MYOCARDIAL CONTUSION | DAB; STEERING WHEEL |
| 15 | CA95002 | AVAILABLE | Aug-94 | Jan-95 | MS | 56 | MALE | 71 | 208 | NO | 1994 | FORD | F150 | 12 | YES | MULTIPLE BILATERAL RIB FXS; STERNUM FX; MULTIPLE INTERNAL INJURIES | DAB |
| 16 | LTC95026 | AVAILABLE | Oct-93 | Mar-95 | 타 | 45 | FEMALE | 64 | 112 | YES | 1991 | MAZDA | MIATA | 10 | YES | C2 FX; LEFT OCCIPITAL CONDYLE FX; CEREBRAL AND SUBARACHNOID HEMORRHAGE; PONS CONTUSION | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|---------------------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------|------------------|
| 17 | LTC95030 | AVAILABLE | Sep-95 | Sep-95 | FL | 41 | FEMALE | 58 | 199 | YES | 1994 | ТОУОТА | TERCEL | 15 | NO | MEDULLA AND SUBARACHNOID HEMORRHAGE: SUBDURAL HEMATOMA; LEFT SIDE PNEUMOTHORAX | DAB |
| 18 | UMTRI/FMA- 077 | AVAILABLE | Feb-95 | Sep-95 | ОН | 22 | FEMALE | 61 | UNK | NO | 1991 | FORD | TAURUS | 10 | YES | PONS AND BRAIN STEM HEMORRHAGE; BASILAR SKULL FX; SUBARACHNOID HEMORRHAGE | DAB |
| 19 | 1996-41-024A (NS96002) | AVAILABLE | Mar-96 | Apr-96 | FL | 79 | MALE | 69 | 180 | YES | 1995 | FORD | ESCORT | 13 | UNK | MULTIPLE BILATERAL RIB FXS; LUNG CONTUSIONS: STERNUM FX; MYOCARDIUM AND PERICARDIUM LACERATION | DAB |
| | CA96017 | AVAILABLE | Jun-96 | Oct-96 | MD | 28 | FEMALE | 63 | 108 | YES | 1990 | MAZDA | MIATA | LOW | NO | ODONTOID BONE FX AND DISLOCATION | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|------------------------------------------------------------------------------------------|------------------|
| See Note 3 | CA95009 | AVAILABLE | Oct-94 | Apr-95 | GA | 29 | FEMALE | 62 | 165 | NO | 1992 | FORD | TAURUS | 8 | YES | ABRUPTED PLACENTA WITH FATAL FETUS | DAB |
| 20 | CA96019 | AVAILABLE | Oct-96 | Oct-96 | MD | 26 | FEMALE | 64 | 153 | NO | 1996 | FORD | WINDSTAR | 18.9 | YES | LACERATION OF THE RIGHT ATRIAL ENDOCARDIUM AND THE ADJACENT INTER-ATRIAL SEPTUM | DAB |
| 21 | IN96028 | AVAILABLE | Sep-96 | Nov-96 | wv | 71 | MALE | 72 | 176 | UNK | 1994 | NISSAN | MAXIMA | 14 | NO | TRANSECTED AORTIC ARCH | DAB |
| 22 | CA97013 | AVAILABLE | Mar-97 | Mar-97 | ME | 51 | MALE | 68 | 200 | NO | 1994 | FORD | PROBE | 8-10 | YES | RIGHT RIB FXS; BLUNT TRAUMA TO CHEST; SUBARACHNOID HEMORRHAGE | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|---------------------------------------------------------------------------------------------|------------------|
| 23 | IN97012 | AVAILABLE | Jun-96 | Apr-97 | ОК | 39 | FEMALE | 60 | 250 | NO | 1994 | FORD | ASPIRE | 13 | YES | HEMOPNEUMOTHORAX LACERATION OF THE THORACIC AORTA | DAB |
| 24 | IN97003 | AVAILABLE | May-92 | Feb-97 | KS | 74 | FEMALE | 61 | 117 | YES | 1991 | MERCURY | GRAND MARQUIS | 8 | NO | MULTIPLE BILATERAL RIB FXS; LACERATED AORTA; C2 FX | DAB |
| 25 | DS97012 | AVAILABLE | Nov-96 | Jun-97 | CA | 58 | FEMALE | 63 | 150 | YES | 1996 | INFINITI | 130 | 11 | NO | MULTIPLE BILATERAL RIB FXS; LACERATED AORTA; BILATERAL LUNG CONTUSIONS; STERNUM FX | DAB |
| 26 | CA97023 | AVAILABLE | Feb-97 | Jun-97 | ИЛ | 37 | FEMALE | 64 | 145 | YES | 1996 | FORD | EXPLORER | 15 | YES | BLUNT TRAUMA TO NECK WITH ASPHYXIA | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 27 | CA97024 | AVAILABLE | Jun-97 | Jun-97 | DE | 53 | FEMALE | 64 | 167 | YES | 1997 | MITSUBISHI | GALANT | 11.2 | NO | THIN SUBDURAL HEMORRHAGE OVER THE LEFT CEREBRAL HEMISHPERE AND MODERATELY ON THE RIGHT CEREBRAL HEMISPHERE | DAB |
| 28 | CA97022 | AVAILABLE | Jun-91 | Jun-97 | FL | 36 | FEMALE | 66 | 160 | NO | 1991 | CHEVROLET | CAPRICE | 17 | YES | MULTIPLE BILATERAL RIB FXS; LACERATED AORTA; MULTIPLE INTERNAL INJURIES | DAB; STEERING WHEEL |
| 29 | IN97019 | AVAILABLE | Jan-97 | Jun-97 | FL | 56 | FEMALE | 64 | 142 | NO | 1994 | BUICK | CENTURY | 12 | NO | LACERATED AORTA; MULTIPLE BILATERAL RIB FXS; STERNUM FX | DAB FLAP; DAB; STEERING WHEEL RIM |
| 30 | CA97021 | AVAILABLE | Nov-96 | May-97 | FL | 78 | FEMALE | 62 | 142 | NO | 1994 | OLDSMOBILE | CUTLASS | 15 | YES | RIGHT RIB FXS; LACERATIONS TO TRICUSPID VALVE LEAFLET AND INTRAVENTRICULAR SEPTUM; AORTIC DISSECTION | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|-------------------|----------------|------------|----------------|----|-----|--------|---------|---------|---------------------------------------------|--------------------------|--------------|-------------------|-----------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 31 | UMTRI/FMA- 059 | AVAILABLE | Nov-93 | Dec-93 | MI | 40 | MALE | 68 | 201 | NO | 1990 | FORD | TAURUS | 19 | NO | BLUNT FORCE TRAUMA TO THE CHEST RESULTING IN SUDDEN HEART STOPPAGE STERNUM FX: BILATERAL LUNG LACERATIONS; LIVER LACERATIONS | DAB |
| 32 | DS97015 | AVAILABLE | Aug-94 | Jun-97 | WA | 58 | MALE | 64 | 115 | MIS-USED - USED SHOULDER BELT ONLY | 1994 | NISSAN | SENTRA | 14.4 | UNK | RIB FRACTURES | DAB |
| 33 | IN97007 | AVAILABLE | Jan-94 | Feb-97 | MI | 80 | MALE | 72 | 133 | NO | 1991 | FORD | CROWN VICTORIA | 8-10 | YES | LACERATED ASCENDING AORTA WITH HEMOPERICARDIUM | DAB |
| 34 | UM97036 | ACTIVE | Apr-97 | Jul-97 | MI | 60 | FEMALE | 63 | 187 | YES | 1994 | LINCOLN | MARK VIII | 21 | NO | C1/C2 DISLOCATION WITH SPINAL CORD COMPRESSION | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 35 | DS97019 | AVAILABLE | Jul-97 | Sep-97 | WA | 77 | FEMALE | 63 | 151 | YES | 1993 | CHEVROLET | CORSICA | 13 | NO | BILATERAL SUBDURAL HEMATOMA; SUBDURAL, SUBARACHNOID, AND SMALL INTRA-VENTRICULAR HEMORRHAGES | DAB |
| | CA97029 | AVAILABLE | May-97 | Sep-97 | NC | 80 | MALE | 73 | 185 | NO | 1991 | FORD | TAURUS | 11 | YES | C4/C5 FX/DISLOCATION RESULTING IN QUADRIPLEGIA; RIGHT TEMPORAL HEMORRHAGE | DAB |
| 36 | IN97044 | AVAILABLE | May-97 | Nov-97 | TX | 63 | MALE | 66 | 156 | NO | 1996 | FORD | CONTOUR | 4.5 | UNK | NONANATOMIC BRAIN INJURIES WITH LOSS OF CONCIOUSNESS AND CARDIOPULMONARY ARREST; SUBARACHNOID HEMORRHAGE DIFFUSE OVER ENTIRE BRAIN | PAB |
| 37 | 1997-45-042 | AVAILABLE | Apr-97 | Nov-97 | TN | 78 | FEMALE | 64 | 120 | NO | 1992 | BUICK | LESABRE | 21 | YES | BLUNT FORCE TRAUMA TO THE CHEST RESULTING IN SUDDEN HEART STOPPAGE | DAB FLAP; DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|-------------------------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|------------------------------------------------------------------------------------------------------|------------------|
| 38 | 1998-04-004B | AVAILABLE | Jan-98 | Feb-98 | NJ | 71 | FEMALE | 62 | 140 | NO | 1993 | BUICK | CENTURY | 9 | YES | MULTIPLE BILATERAL RIB FXS WITH HEMOTHORACES; STERNUM FX; AORTIC AND PERICARDIAL LACERATION | DAB |
| 39 | 1997-04-146A | AVAILABLE | Oct-97 | Nov-98 | NJ | 84 | FEMALE | UNK | UNK | MIS-USED - USED LAP BELT ONLY | 1996 | GEO | METRO | 19 | NO | MULTIPLE RIGHT RIB FXS WITH PNEUMOTHORAX | DAB |
| 40 | IN97038 | AVAILABLE | Nov-97 | Nov-97 | MN | 17 | FEMALE | 47 | 80 | NO | 1992 | ТОУОТА | CELICA | 13 | NO | DIFFUSE SUBDURAL & SUBARACHNOID HEMORRHAGES; MINIMAL ATLANTO-OCCIPITAL SEPARATION | DAB |
| 41 | IN97022 | AVAILABLE | Jun-97 | Jul-97 | MS | 79 | FEMALE | 62 | 155 | NO | 1993 | FORD | TAURUS | 16 | NO | MULTIPLE RIB FXS; LUNG LACERATIONS WITH HEMOPNEUMOTHORACES; STERNUM FX; LACERATED LIVER AND SPLEEN | DAB FLAP; DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 42 | CA98030 | AVAILABLE | May-98 | May-98 | DE | 38 | FEMALE | 63 | 196 | NO | 1995 | MITSUBISHI | MIRAGE | 13 | NO | RIGHT VENTRICLE PERFORATION; PULMONARY LACERATION WITH HEMOTHORAX; CLOSED HEAD INJURY | DAB |
| 43 | CA98044 | AVAILABLE | Jul-98 | Aug-98 | VA | 45 | MALE | 71 | 200 | NO | 1991 | DODGE | SPIRIT | 18 | YES | ATLANTO-OCCIPITAL DISLOCATION WITH COMPLETE TRANSECTION OF THE SPINAL CORD, PONTINE CONTUSIONS; SUB-ARACHNOID HEMORRHAGE INVOLVING CEREBELLUM AND BRAIN STEM | DAB |
| 44 | IN98021 | AVAILABLE | Aug-97 | Oct-98 | TX | 18 | FEMALE | 62 | 123 | YES | 1991 | FORD | TAURUS | 11.7 | YES | DIFFUSE AXONAL INJURY; NONANATOMIC BRAIN INJURY; BRAIN CONTUSION | DAB |
| 45 | CA98050 | AVAILABLE | Jun-98 | Sep-98 | СТ | 62 | FEMALE | 61 | 125 | UNK | 1995 | FORD | ESCORT | 14 | NO | MULTIPLE ANTERIOR RIB FXS WITH HEMOTHORACES; STERNUM FX | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------|------------------|
| 46 | CA98051 | AVAILABLE | Feb-96 | Sep-98 | VA | 86 | MALE | 65 | 142 | NO | 1992 | LINCOLN | CONTINENTAL | 14-18 | NO | MULTIPLE BILATERAL RIB FXS WITH BILATERAL HEMOTHORAX; SUPERIOR VENA CAVA RUPTURE; LIVER LACERATIONS | DAB FLAP; DAB |
| 47 | CA98032 | AVAILABLE | Jul-97 | May-98 | PA | 88 | MALE | 67 | 180 | NO | 1997 | LINCOLN | CONTINENTAL | 7-9 | YES | MULTIPLE BILATERAL RIB FXS WITH BILATERAL HEMOTHORAX; STERNUM FX; RIGHT VENTRICLE LACERATION | DAB FLAP |
| | CA98055 | AVAILABLE | Oct-98 | Oct-98 | PA | 19 | FEMALE | 62 | 138 | NO | 1998 | MITSUBISHI | MIRAGE | 10 | YES | ABRUPTED PLACENTA WITH FATAL FETUS | DAB FLAP; DAB |
| 48 | DS98026 | AVAILABLE | Jun-98 | Sep-98 | OR | 74 | FEMALE | 65 | 220 | NO | 1995 | PLYMOUTH | VOYAGER | 11 | YES | CRUSHING CHEST INJURY WITH MULTIPLE RIB FRACTURES | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|-------------------|-----------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------|------------------|
| 49 | CA98048 | AVAILABLE | Aug-98 | Sep-98 | NC | 61 | FEMALE | 60 | 140 | YES | 1996 | OLDSMOBILE | 98 | 14 TO 18 | NO | BRAINSTEM CONTUSION AND AN ATLANTO-OCCIPITAL DISLOCATION, RIB FRACTURE; SUBARACHNOID HEMORRHAGE CEREBELLUM | DAB |
| 50 | 1997-72-103A | AVAILABLE | Aug-97 | Aug-97 | IL | 62 | FEMALE | 64 | 146 | NO | 1996 | FORD | TAURUS | 19 | UNK | FRACTURED RIBS | DAB |
| 51 | CA98063 | AVAILABLE | Oct-98 | Nov-98 | NJ | 52 | FEMALE | 62 | 115 | YES | 1993 | ТОУОТА | COROLLA | 11 | NO | FRACTURE C2/C3 WITH COMPLETE CORD TRANSECTION | DAB |
| 52 | IN98013 | AVAILABLE | Jan-98 | Jan-98 | IL | 26 | FEMALE | 64 | 130 | NO | 1995 | JEEP | GRAND CHEROKEE | 6 | NO | ATLANTO-OCCIPITAL DISLOCATION WITH CONTUSION TO THE SPINAL CORD | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|-------------------------------------------------------------------------------------|------------------|
| 53 | IN98032 | AVAILABLE | Dec-98 | Dec-98 | IL | 39 | FEMALE | 66 | 130 | NO | 1998 | DODGE | CARAVAN | 23 | NO | MULTIPLE BILATERAL RIB FRACTURES LACERATED LEFT PULMONARY VEIN | DAB |
| 54 | DS98021 | AVAILABLE | Oct-97 | Jul-98 | СО | 80 | MALE | 66 | 140 | NO | 1991 | DODGE | DYNASTY | 11 | NO | SKULL FRACTURE WITH SUBDURAL HEMORRHAGE; BILATERAL SUBARACHNOID HEMORRHAGE | DAB |
| | CA98054 | AVAILABLE | Mar-94 | Sep-98 | VA | 58 | FEMALE | 64 | UNK | NO | 1990 | CHRYSLER | LEBARON | 17 | NO | C1/C2 FX; SPINAL CORD DAMAGE RESULTING IN QUADRIPLEGIA | DAB |
| 55 | CA99012 | AVAILABLE | Dec-98 | May-99 | PA | 80 | FEMALE | 67 | 175 | NO | 1998 | BUICK | REGAL | 18.6 | UNK | HEART LACERATION | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | | St | | Sex | | Wt (LB) | | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|--------|----|----|--------|----|---------|-----|--------------------------|--------------|-------------------|--------------------------|---------------------------|--------------------------------------------------------------------------------------------|------------------|
| 56 | DS99048 | AVAILABLE | Dec-95 | Oct-99 | OR | 37 | FEMALE | 66 | 175 | YES | 1993 | JEEP | GRAND CHEROKEE | (MPH) 16 | NO | DEVASTATING INFRA- AND SUPRADIAPHRAGMATIC CAVAL INJURIES | DAB |
| 57 | CA99049 | AVAILABLE | Nov-99 | Nov-99 | NC | 79 | FEMALE | 59 | 117 | NO | 1991 | FORD | TAURUS | 13 | YES | MULTIPLE BILATERAL RIB FRACTURES WITH PULMONARY CONTUSION | DAB FLAP; DAB |
| 58 | IN99076 | AVAILABLE | Jun-99 | Jul-99 | IL | 19 | FEMALE | 60 | 115 | NO | 1991 | CHEVROLET | CORSICA | 7.5 | NO | CONTUSION CERVICAL SPINAL CORD AT C2 WITH FRACTURE AT C2 AND DISLOCATION BELOW C2 | DAB FLAP |
| 59 | CA00006 | AVAILABLE | Feb-00 | Feb-00 | FL | 45 | FEMALE | 62 | 170 | YES | 1994 | PONTIAC | BONNEVILLE | 18 | NO | TRANSVERSE BASILAR SKULL FRACTURE, SUB-DURAL HEMORRHAGE, FX SINUSES | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | | St | | Sex | | Wt (LB) | | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|--------|----|----|--------|----|---------|----|--------------------------|--------------|------------------|-----------------------------------|---------------------------|--------------------------------------------------------------|------------------|
| 60 | CA00012 | AVAILABLE | Jan-00 | May-00 | MA | 24 | FEMALE | 62 | 110 | NO | 1994 | GEO | PRIZM | 11 | YES | HINGE FRACTURE AT BASE OF SKULL | DAB |
| 61 | CA00015 | AVAILABLE | Mar-00 | May-00 | NC | 57 | FEMALE | 64 | 116 | NO | 1992 | BUICK | ROADMASTER | 18 | NO | BASILAR SKULL FX | DAB |
| 62 | IN00002 | AVAILABLE | Feb-00 | Apr-00 | wv | 16 | FEMALE | 63 | 102 | NO | 1990 | PLYMOUTH | SUNDANCE | 7.3 | NO | TRAUMATIC CERVICAL SPINE INJURY, NOT FURTHER SPECIFIED | DAB |
| 63 | DS98013 | AVAILABLE | Jun-97 | Apr-98 | TX | 52 | FEMALE | 61 | 111 | Ю | 1994 | ТОУОТА | COROLLA | 13.4 | NO | TWO IRREGULAR LACERATIONS TO ATRIAL SEPTUM | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|-------------------|-----------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 64 | CA98071 | AVAILABLE | Apr-98 | Dec-98 | FL | 79 | FEMALE | 62 | 144 | YES | 1994 | ТОУОТА | CAMRY | 15-20 | UNK | BILATERAL RIB FRACTURES 2-8, ORIGINATING LATERALLY AND EXTENDING ANTERIORLY WITH BILATERAL HEMOTHORACES AND COMPLETE COLLAPSE OF THE LEFT LUNG AND PARTIAL OF THE RIGHT | DAB |
| 65 | IN01001 | AVAILABLE | Nov-98 | Jan-01 | TX | 84 | FEMALE | 56 | 108 | NO | 1991 | FORD | CROWN VICTORIA | 9 -13 | NO | LACERATIONS MYOCARDIUM, (2.0 in), GAPING, POSTERIOR RIGHT VENTRICLE WITH HEMOMEDIASTINUM | DAB; MODULE COVER FLAP |
| 66 | CA97035 | AVAILABLE | Oct-97 | Oct-97 | NH | 61 | FEMALE | 64 | 177 | NO | 1994 | CHEVROLET | CORSICA | 14.1 | UNK | COMPLETE HINGE-TYPE FRACTURE OF THE BASE OF SKULL | DAB |
| | IN97051 | AVAILABLE | Dec-97 | Dec-97 | KY | 61 | FEMALE | 68 | 155 | NO | 1996 | BUICK | CENTURY | 22 | NO | C2 TEARDROP FRACTURE RESULTING FROM HYPEREXTENSION | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 67 | DS01001 | AVAILABLE | Dec-00 | Jan-01 | ID | 34 | FEMALE | 64 | UNK | NO | 1995 | PLYMOUTH | GRAND VOYAGER | 23 | NO | BROKEN NECK | DAB |
| 68 | CA01027 | AVAILABLE | Jun-94 | May-01 | VA | 36 | FEMALE | 66 | 119 | NO | 1992 | MAZDA | MIATA | 6 TO 16 | UNK | MULTIPLE BRAIN STEM HEMORRHAGES | DAB |
| 69 | CA98064 | AVAILABLE | Aug-97 | Nov-98 | PA | 53 | FEMALE | 66 | 160 | NO | 1997 | ТОУОТА | CAMRY | 15 TO 20 (LONG.) | NO | PARTIAL VENTRAL DISTRACTION OF THE PONS FROM THE BRAIN STEM WITH WIDESPREAD FOCAL SUBARACHNOID HEMORRHAGE OF ALL ASPECTS OF CEREBRAL HEMISPHERES | DAB; FLAP |
| 70 | CA99064 | AVAILABLE | Jul-98 | Sep-99 | NY | 70 | MALE | UNK | UNK | NO | 1998 | MERCURY | MOUNTAINEER | MODERATE | NO | CARDIAC TAMPONADE | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|----------------|------------|----------------|----|-----|--------|---------|---------|-------------------------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 71 | CA01038 | AVAILABLE | Jun-01 | Jul-01 | PA | 78 | MALE | 67 | 180 | NO | 1996 | GEO | METRO | 23.6 | YES | PUNCTURED RIGHT VENTRICLE | DAB |
| 72 | CA00022 | AVAILABLE | Jun-00 | Jun-00 | NY | 86 | FEMALE | 58 | 100 | MIS-USED - USED LAP BELT ONLY | 1993 | CHEVROLET | CORSICA | 11 | NO | BILATERAL SUBDURAL HYGROMAS WITH ACUTE SUBDURAL HEMORPHAGE ANTERIOR TO THE FRONTAL LOBE | DAB |
| 73 | CA99048 | AVAILABLE | Jul-99 | Nov-99 | KY | 44 | FEMALE | 65 | 140 | YES | 1997 | MERCURY | SABLE | 10.2 | NO | MASSIVE EDEMA WITH OBLITERATED BASAL CISTERNS | DAB |
| 74 | CA02016 | AVAILABLE | Jun-01 | Apr-02 | PA | 41 | MALE | 67 | 170 | Ю | 1996 | FORD | F-150 | 11.6 | YES | CRUSH TRAUMA OF THE PONS AND TRANSECTION OF THE PONS FROM THE CEREBRUM AND MULTIPLE TRAUMATIC INJURIES TO THE BRAINSTEM | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|-----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|--------------------------------------------------|------------------|
| 75 | CA02008 | UNDER REVIEW | Nov-98 | Feb-02 | IL | 48 | FEMALE | 65 | 143 | YES | 1998 | FORD | RANGER | 18.1 | UNK | PONTOMEDULLARY AVULSION | DAB |
| 76 | CA00060 | AVAILABLE | Dec-00 | Dec-00 | NY | 40 | MALE | 69 | 212 | NO | 1994 | FORD | F150 | 10.7 | UNK | BILATERAL UNCAL GROOVING AND TONSILLAR CONING | DAB |
| 77 | CA03016 | UNDER REVIEW | Feb-03 | Feb-03 | ОН | 78 | MALE | 65 | 145 | YES | 1996 | MERCURY | SABLE | 6.5 | UNK | SUBDURAL HEMATOMA; INTRACRANIAL HEMORRHAGE | DAB |
| 78 | DS03018 | AVAILABLE | May-03 | May-03 | СО | 16 | FEMALE | 62 | 105 | NO | 1992 | FORD | TAURUS | 7.5 | YES | BASILAR SKULL FRACTURE | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|-----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|-------------------|-----------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------|
| 79 | CA02026 | AVAILABLE | Dec-95 | Jun-02 | MA | 60 | FEMALE | 66 | 175 | NO | 1994 | GEO | PRIZM | 6 TO 16 | UNK | 2.5 CM VERTICALLY ORIENTED LACERATION TO THE ANTERIOR BASE OF THE RIGHT VENTRICLE WITH EXTENSIVE PERICARDIAL HEMORRHAGE | DAB |
| 80 | IN02016 | AVAILABLE | Nov-02 | Nov-02 | TX | 82 | FEMALE | 61 | 148 | YES | 1993 | FORD | CROWN VICTORIA | 9.9 | NO | RIB CAGE FRACTURE >3 RIBS ON EACH OF TWO SIDES, WITH BILATERAL HEMOTHORACES | DAB |
| 81 | CA03066 | UNDER REVIEW | Mar-00 | Nov-03 | FL | 27 | FEMALE | 69 | 150 | UNK | 1996 | FORD | TAURUS | 8.3 | UNK | BILATERAL RIB FRACTURES WITH BILATERAL HEMOTHORAX | DAB |
| 82 | 2003-49-115 | UNDER REVIEW | May-03 | Sep-03 | TX | 44 | FEMALE | 63 | 190 | YES | 1999 | CHEVROLET | SILVERADO | 23.0 | UNK | BRAIN STEM TEAR/LACERATION WITH ASSOCIATED SUBARACHNOID HEMORRHAGE | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|-----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------|------------------|
| 83 | CA03047 | UNDER REVIEW | Aug-03 | Aug-03 | NJ | 79 | FEMALE | 54 | 134 | NO | 2000 | CHEVROLET | PRIZM | 23.6 | UNK | SYMMETRICAL BILATERAL RIB FRACTURES 1-9 WITH FLAIL CHEST AND 1000CC OF BLOOD IN THE RIGHT CHEST | DAB |
| 84 | 2003-82-086B | UNDER REVIEW | Jul-03 | Mar-04 | WA | 59 | MALE | 65 | 156 | YES | 1997 | ТОУОТА | CAMRY | 21.1 | UNK | RIB FRACTURES, LEFT 4TH THROUGH 6TH ANTERIOR, RIGHT 4TH THROUGH 7TH ANTERIOR | DAB |
| 85 | IN03033 | UNDER REVIEW | Jul-03 | Jul-03 | МО | 35 | FEMALE | 65 | 120 | NO | 1997 | FORD | EXPLORER | 12.4 | YES | SEVERE EDEMA | DAB |
| | CA04050 | UNDER REVIEW | Nov-04 | Nov-04 | ОН | 62 | FEMALE | 61 | 190 | YES | 1996 | CHEVROLET | CAVALIER | < 6.2 | NO | C5 SPINAL STENOSIS WITH SPINAL CORD COMPRESSION AND CENTRAL CORD SYNDROME | DAB |

CASES FROM THE NATIONAL CENTER FOR STATISTICS AND ANALYSIS SPECIAL CRASH INVESTIGATIONS PROGRAM

DRIVERS WHO SUSTAINED FATAL OR SERIOUS INJURIES IN MINOR OR MODERATE SEVERITY AIR BAG DEPLOYMENT CRASHES

| Fatal Count | Case Number | Case Status | Crash Date | Invest Date | St | Age | Sex | Ht (IN) | Wt (LB) | Restraint Use | Vehicle Model Year | Vehicle Make | Vehicle Model | Change In Velocity (MPH) | Pre- Impact Braking | Injury Descriptions | Injury Source |
|----------------|----------------|-----------------|------------|----------------|----|-----|--------|---------|---------|------------------|--------------------------|--------------|------------------|-----------------------------------|---------------------------|---------------------------------|------------------|
| 86 | CA04053 | UNDER REVIEW | Jul-04 | Dec-04 | GA | 83 | FEMALE | 66 | 110 | YES | 1993 | CHEVROLET | CORSICA | 12-15 | UNK | BILATERAL SUBDURAL HEMATOMAS | DAB |

REPORT NOTES

- □ ACTIVE INVESTIGATION INITIATED AND CONTINUING; REPORT NOT YET RECEIVED AT NHTSA
- □ UNDER REVIEW INVESTIGATION COMPLETE; REPORT UNDER REVIEW BY NHTSA STAFF; REPORT NOT AVAILABLE
- □ AVAILABLE REPORT REVIEW COMPLETE; REPORT PLACED IN PUBLIC FILE AND AVAILABLE FROM OUR WEBSITE:

HTTP://WWW-NRD.NHTSA.DOT.GOV/DEPARTMENTS/NRD-30/NCSA/SCI.HTML

- □ UNK UNKNOWN
- □ PAB FLAP PASSENGER'S AIR BAG COVER FLAP
- □ DAB DRIVER'S AIR BAG
- □ N/A NOT APPLICABLE
- □ PAB PASSENGER'S AIR BAG
- □ FX FRACTURE

NOTES

- 3 AN UNBELTED PREGNANT FEMALE SUSTAINED AN ABRUPTION OF THE PLACENTA FROM THE UTERINE WALL AND THE FETUS SUBSEQUENTLY EXPIRED. SEE CASE CA9509.
- 4 DRIVER EXPIRED APPROXIMATELY SIX WEEKS POST CRASH OF PNEUMONIA. THE NHTSA DEFINITION FOR THE TIME TO DEATH IN A FATAL CRASH IS "EXPIRED WITHIN 30 DAYS OR LESS AFTER THE CRASH." SEE CASE CA9729.